



PRODUCT TECHNICAL DATA SHEET

POLYASPARTIC 80

Advanced Coating Systems

HIGH PERFORMANCE ALIPHATIC POLYASPARTIC FINISH COAT

GENERAL PRODUCT DESCRIPTION

Polyaspartic 80 is a two-component, high performance aliphatic, polyaspartic finish floor coating. It is 80% solids for lower viscosity and 0-V.O.C. Polyaspartic 80 provides a high gloss finish and is the product of choice for a fast curing, interior/exterior top coat over most ONYX base systems. It should only be applied over a smooth epoxy primer/coating or broadcast base system. Because Polyaspartic 80 has limited working time, it is recommended to ensure there is additional experienced manpower for larger projects. Otherwise, contact ONYX for alternate systems. For durability, stain resistance, UV stability, and a finish coat which beautifies concrete for years, Polyaspartic 80 is unmatched. It is also formulated to be used with most other ONYX base systems.

ADVANTAGES

- 0-VOC High Solids
- Fast Curing
- High Gloss Finish
- Withstands Heavy Traffic
- Chemical Resistant
- UV Stability
- Mar Resistant
- Low Temperature Cure
- Color Stability

PRODUCT DATA

Volumetric Ratio:	1 to 1
Solids:	80%
Approximate Coverage:	150-250 Sq Ft per Gallon (smooth surface) 100-150 Sq Ft per Gallon (broadcast surface)
Application Temperature:	40-90°F and 5° above dew pt.
Pot Life:	5-7 minutes
Cure Time:	2-4 hrs. (walking) 48 hrs. (traffic) @ 75°F
Critical Recoat Time:	24 hours
Shelf Life:	1 year from date of manufacture
USDA Food and Beverage:	Meets requirements for incidental contact

PACKAGING

Polyaspartic 80 is available in 2 different kit sizes:

	Part A	Part B
2 Gallon Kit	1 gallon	1 gallon
10 Gallon Kit	5 gallons	5 gallons

APPLICATIONS

- Cold Storage
- Decorative Chip / Quartz Floors
- Manufacturing
- Commercial Buildings / Walkways
- Restrooms
- Pharmaceutical
- Food Preparation
- Aisle Ways
- Clean Rooms
- Automotive Showrooms / Service Bays
- Schools
- Retail

PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Tear Resistance	270 psi	ASTM D 1004
Tensile Strength	3,980 psi	ASTM D 412
Ultimate Elongation	60%	ASTM D 412
Gloss (60 deg)	90%	ASTM D 523
Coefficient of Friction	0.6 minimum	ASTM D 2047

COLORS

Polyaspartic 80 standard colors are: Clear, black, white, light gray, medium gray, dark gray, night gray, light beige, dark beige, sand beige, dark blue, tile red, safety red, and safety yellow.

CONCRETE PREPARATION

Polyaspartic 80 is formulated to go over a smooth epoxy primer or preexisting broadcasted surface. If over a smooth system, stay within the critical recoat window and lightly sand down epoxy as needed. If over a broadcast system, sand down or scrape the base system as needed to reach desired texture for the final finish. The concrete underneath the base system must be prepped the following way:

- Clean – Contaminants removed
- Profiled – Surface mechanically prepared
- Sound – Cracks repaired

Mechanical methods are required for preparing concrete prior to coating application. Refer to the data sheet of the base system to follow specific prep guidelines as pertains to the equipment used and the CSP level.

MIXING

The mix ratio of Polyaspartic 80 is 1 to 1. That is, 1 Part of A - resin, to 1 Part of B - hardener. Generally, 1 mixed gallon is ideal for application. Mix the following with a drill and jiffiler mixer.

1. Pre-mix Part A for about 45-60 seconds until uniform. Pour out 1/2 gallon of part A into a clean, empty mixing bucket.
2. Add 1/2 gallon of Part B and mix for 90 seconds to 2 minutes until homogeneous. Be careful to scrape sides of bucket to insure that no unmixed material remains.
3. Immediately apply to the floor. Polyaspartic 80 in mass has a short pot life. Once poured out on the floor, 5-8 minutes of working time can generally be expected.

APPLICATION PROCESS

Polyaspartic 80 is generally applied as the final top coat. If installing over a smooth epoxy primer/coating, apply at 150-250 Sq Ft per gallon. (If more build is required, use 2 coats.) If installing over a broadcasted (unglazed) base system, apply at 150-100 Sq Ft per gallon depending on the textured surface and desired finish. Refer to other ONYX data sheets for application of base systems that the Polyaspartic 80 will be applied over. As a general rule polyurethanes/polyaspartics should not be applied directly to concrete.

1. It is always best to apply in descending temperatures especially for exterior applications. Optimum ambient temperature should be between 40-90°F and 5° above the dew point during application.
2. Mix 1 gallon of resin using the above mixing instructions.
3. Only if needed, you may thin material by adding 1 pint of acetone per gallon of Polyaspartic 80.
4. Apply by immediately pouring out on surface in a ribbon, while walking and pouring.
4. Using a window squeegee on a pole, pull the coating evenly over substrate.
5. Using a 3/8" non-shedding phenolic (plastic) core paint roller, roll coating forwards and backwards.
6. Lastly, backroll in the opposite direction from step 5. Roll the floor in 1 continuous step without stopping and do not go back and touch up.
7. Because Polyaspartic 80 has a short pot life and limited working time, be mindful of the ventilation. The more air flow, the more it will shorten the pot life and working time. The installers must move fast, keeping a wet edge. Mix in small batches until comfortable working with the material. Do not over roll, which causes the material to tack up.

PRODUCT LIMITATION

Always read ONYX PRODUCT LIMITATION GUIDELINES document prior to installation as the content below is only partial information.

Ground level concrete slabs emit moisture vapor. The allowable vapor emissions for concrete is 3 lbs. per 1,000 Sq Ft over a 24 hour period. If vapor is above this level, then blistering and delamination of the coating may occur. A calcium chloride test, in accordance with ASTM F1869 Standards, should be performed to determine the concrete vapor level. If the vapor levels exceed the 3 lb. limit, a concrete vapor control system should be used before applying any coating system. Please contact the ONYX technical department for approved systems.

Coating systems are susceptible to cracking if the concrete moves or separates below the coating. Hence, joint and crack treatment should be reviewed prior to the coating application. As a general rule, control joints (saw cuts) and random cracks should be saw cut or chased first, then filled with the appropriate patch material. Construction joints (2 slabs which meet and hence move) should be treated. After the coating has been applied and cured, saw cut through the coating over construction joints.

CLEANUP

Polyaspartic 80 while in a liquid state may be cleaned up with water and degreaser. Otherwise, a strong solvent may be required while the product is setting up.

WARRANTY

ONYX products are warranted for 1 year after date of manufacture. Please refer to the ONYX Concrete Coating's Limited Material Warranty for additional clarification.

SAFETY

Consult Polyaspartic 80 safety data sheet. Avoid Polyaspartic 80 contact with eyes and skin. Always wear protective eyewear, clothing, and gloves. Safety always comes first.

MAINTENANCE

Refer to the ONYX Maintenance and Cleaning Guidelines.